

## **WATER ELECTRONIC TECHNICIAN**

### **DISTINGUISHING FEATURES**

The fundamental reason the Water Electronic Technician position exists is to perform industrial journey-level electrical, electronic and computer work in the installation, maintenance, and repair of the City's water and wastewater systems and equipment. The Water Electronic Technician position is non-supervisory. This position reports to the Water Operations Supervisor.

### **ESSENTIAL FUNCTIONS**

Installs, maintains and repairs high-voltage electrical systems, well pump equipment, booster stations, sewer lift stations, motors, switch gear, and control equipment.

Maintains, repairs and calibrates electrical, solid state electronic, and process control equipment using instruments such as voltmeters, ammeters, ohmmeters, oscilloscopes, spectrum analyzers, signal generators, frequency counters, and data-line analyzers.

Troubleshoots and repairs complex equipment failures.

Installs, troubleshoots and repairs hardware for the telemetry system; performs calibrations on instrumentation equipment and metering devices and installs, maintains, troubleshoots, repairs and programs voice radio equipment in department vehicles and offices.

Monitors and collects data from cathodic protection test stations throughout the City's water system to determine pipeline conditions. Monitors and maintains adequate parts inventories to allow City water pumping facilities to maintain an uninterrupted supply of water to customers.

Troubleshoots and repairs process control equipment located at the City's water and wastewater treatment facilities; uses the data collected from the telemetry system to develop reports and assist other personnel to use the available data by reconfiguring the SCADA system data collection as necessary to achieve the desired results.

### **MINIMUM QUALIFICATIONS**

#### **Knowledge, Skills, and Abilities**

##### Knowledge of:

The principles, methods, materials and tools used in the electronic/electrical trade; the hazards and precautionary methods; the theory and practical applications of industrial and solid state electronic control systems; the functions and mechanics of electrical motors, centrifugal and deep well turbine pumps and water transmission systems.

##### Ability to:

Work rotating weekend shifts, holidays and a call-out schedule.

Communicate orally by telephone and two-way radio

Troubleshoot defects in electrical and electronic systems and equipment

Establish and maintain effective working relationships with co-workers, supervisors and the general public.

Operate a variety of equipment and machinery requiring continuous or repetitive arm and hand movements.

Prioritize schedule and work tasks and complete work within specified time periods and deadlines.  
Move and lift heavy objects (50 pounds or more) both short and long distances.  
Walk up and down stairs, climb up and down ladders and, traverse over rough terrain.  
Work in adverse conditions, including extreme hot temperatures, cold temperatures, wind, rain and a high volume of noise.

**Education & Experience**

Any combination of training, education and experience equivalent to completion of a recognized electrical apprenticeship and five years of experience as a journey level electrician in an industrial setting.

Completion of a recognized electronics course, along with three years of experience as an electronics or instrumentation technician is necessary. Some experience with municipal water systems is highly desirable.

Must possess and maintain during this position a valid Arizona Driver's License, with no major driving citations in the last 39 months for all driving positions.

**Special Requirements:** Certification as a Water Distribution State Operator and certification as a Wastewater Collection Operator I within one year of hire.

**FLSA Status: Non-exempt**

**HR Ordinance Status: Classified**